



UNITED STATES DEPARTMENT OF COMMERCE  
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07/983,848 04/29/93 YAMAMOTO

ESM1/0323

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K TTAPCT2

EXAMINER

ROBBINS, T

ART UNIT

PAPER NUMBER

11

2507

DATE MAILED:

03/23/94

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This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

- ☐ This application has been examined ☒ Responsive to communication filed on 1-4-94 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), — days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.                 | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152.       |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474.     | 6. <input type="checkbox"/> _____   |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-10 are pending in the application.  
Of the above, claims \_\_\_\_\_ are withdrawn from consideration.
2. ☐ Claims \_\_\_\_\_ have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1-10 are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

Art Unit: 2507

*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. § 102(b) as being anticipated by Yamada. Yamada teaches all the limitations of claim 1 with the exception of a video display. Though the Yamada reference fails to disclose this feature, it is noted to be an inherent characteristic of a video camera system.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102

Art Unit: 2507

of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 2 and 7 are rejected under 35 U.S.C. § 103 as being unpatentable over Yamada in view of Young et al. Yamada teaches all the limitations of claims 2 and 7 with the exception of the detachably mountable illumination source comprising a plurality of lamps. Young et al teach this feature in a lighting apparatus for use with a motion picture camera (see item 12, fig. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the video camera system as taught by Yamada with the photographic lighting unit as taught by Young et al for the purpose of increasing the amount of light which illuminates the photographed object.

Claim 3 are rejected under 35 U.S.C. § 103 as being unpatentable over Yamada in view of Wolff. Yamada teaches all the limitations of claim 3 with the exception of the front end portion of the image pick-up apparatus. This feature is well known in the art of periscopes as taught by Wolff (see Fig. 1). Although Wolff depicts a periscopic simulator device, it is readily apparent that this feature can be used for any periscopic apparatus. It would have been obvious at the time of the

Art Unit: 2507

invention to one of ordinary skill in the art to combine the video camera system as taught by Yamada with the periscopic device as taught by Wolff for the purpose of improving the viewing capabilities of the periscope with the adjustable focus on the camera.

Claims 4 and 6 are rejected under 35 U.S.C. § 103 as being unpatentable over Yamada in view of Bravenec. Yamada teaches all the limitations of claims 4 and 6 with the exception of the objective lens and the imaging device slide in interlock with each other while keeping the image in focus. Bravenec teaches an objective lens (item 46 Fig. 2) that slides in interlock with a photographic plate (items 56 and 58, in Fig. 2) for the purpose of having an automatic focusing device for a camera system (see col. 3 lines 14-26). In the case of Bravenec, the photographic plate is an imaging device. One of ordinary skill in the art would be able to replace this photographic plate for another imaging device, for example a CCD array, for the purpose of obtaining a video output. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the video camera system as taught by Yamada with the relative objective lens and imaging device as taught by Bravenec for the purpose of having an automatic focussing assembly for the video camera. Although the equation:  $1/a + 1/b = 1/f$ , as taught by

Art Unit: 2507

Bravenec (claim 1), is not addressed, this is an elementary imaging equation known to anyone of any skill in the art of optics.

Claim 5 is rejected under 35 U.S.C. § 103 as being unpatentable over Yamada in view of Bravenec as applied to claim 4 above, and further in view of Nakagawa. The combination of Yamada and Bravenec teach all the limitations of claim 5 with the exception of the adjustable cam for controlling the focussing which surrounds the imaging device (surrounded by a cylinder) at one end and the objective (surrounded by another cylinder) at the opposing end. This type of cam adjustment for a camera is well known in the art as taught by Nakagawa (see abstract and Fig. 1). It would have been obvious to one of ordinary skill in the art to combine the focusing video camera as taught by the combination of Yamada in view of Bravenec with the cam device as taught by Nakagawa for the purpose of having an easily adjustable zoom lens for a video camera.

Claim 8 is rejected under 35 U.S.C. § 103 as being unpatentable over Yamada in view of Young et al as applied to claim 7 above, and further in view of Wolff. The combination of Yamada and Young et al teaches all the limitations of claim 8 with the exception of the front end portion of the image pick-up

Art Unit: 2507

apparatus. This feature is well known in the art of periscopes as taught by Wolff (see Fig. 1). Although Wolff depicts a periscopic simulator device, it is readily apparent that this feature can be used for any periscopic apparatus. It would have been obvious at the time of the invention to one of ordinary skill in the art to combine the video camera system as taught by the combination of Yamada with the periscopic device as taught by Wolff for the purpose of improving the viewing capabilities of the periscope with the adjustable focus on the camera.

Claim 9 is rejected under 35 U.S.C. § 103 as being unpatentable over Yamada in view of Young et al as applied to claim 7 above, and further in view of Bravenec. The combination of Yamada and Young et al teaches all the limitations of claim 9 with the exception of the objective lens and the imaging device slide in interlock with each other while keeping the image in focus. Bravenec teaches an objective lens (item 46 Fig. 2) that slides in interlock with a photographic plate (items 56 and 58, in Fig. 2) for the purpose of having an automatic focusing device for a camera system (see col. 3 lines 14-26). In the case of Bravenec, the photographic plate is an imaging device. One of ordinary skill in the art would be able to replace this photographic plate for another imaging device, for example a CCD array, for the purpose of obtaining a video output. It would

Art Unit: 2507

have been obvious to one of ordinary skill in the art at the time of the invention to combine the video periscopic camera system as taught by the combination of Yamada and Young et al with the relative objective lens and imaging device as taught by Bravenec for the purpose of having an automatic focussing assembly for the video camera. Although the equation:  $1/a + 1/b = 1/f$ , as taught by Bravenec (claim 1), is not addressed, this is an elementary imaging equation known to anyone of any skill in the art of optics.

Claim 10 is rejected under 35 U.S.C. § 103 as being unpatentable over Yamada, Young et al, Wolff, and Bravenec as applied to claim 9 above, and further in view of Nakagawa. The combination of Yamada, Young et al, Wolff, and Bravenec teaches all the limitations of claim 10 with the exception of the adjustable cam for controlling the focussing which surrounds the imaging device (surrounded by a cylinder) at one end and the objective (surrounded by another cylinder) at the opposing end. This type of cam adjustment for a camera is well known in the art as taught by Nakagawa (see abstract and Fig. 1). It would have been obvious to one of ordinary skill in the art to combine the focusing video periscopic camera as taught by the combination of Yamada, Young et al, Wolff, and Bravenec with the cam device as

Serial Number: 07/983848

-8-

Art Unit: 2507

taught by Nakagawa for the purpose of having an easily adjustable zoom lens for a video periscopic camera.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Robbins whose telephone number is (703) 305-3792.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

*Thomas Robbins*

Thomas Robbins  
March 18, 1994

*Loha Ben*

LOHA BEN  
SUPERVISORY PATENT EXAMINER  
GROUP 2500